

Field Data Collection
(2010 Standard Inspection)

Company: TransCanada Gas Transmission Northwest (GTN), OPID # 15014

Unit: Wallula District, Unit #3605

Inspector: Al Jones/UTC

Pipe-to-soil potential readings and other items

Please note: The A and B pipelines are 36 and 42 inch diameter, respectively.

Date	Location	Pipe (Volts DC)	Casing (Volts DC)	Comments
8/25/2010	MP 206.8 B-Line Snake River at Hwy 261	-1.067 on -0.948 off	-0.204	All CP potential were taken by Brett Huntley, GTN field technician.
8/25	MP 207.0 B-Line Abandoned RR Xing	-1.089 on -0.946 off	-0.286	
8/25	MP 206.7 A-Line, Snake River Grain Elevator	-1.014 on -0.924 off	-0.370	
8/25	MP 206.8 A-Line, Hwy 261 Xing	-0.938 on -0.840 off	-0.388	
8/25	MP 208.8 Starbuck Rectifier on Fletcher Rd.	14.8 vDC 5.3 Amps C-1, F-5		New Deep Well Note: Since the last inspection, the positive wire to the ground beds <u>has been</u> labeled per PHMSA Notice.
8/25	MP 211.8 A-Line, Lyons Ferry Rd.	-1.308 on -1.217off		
8/25	MP 211.8 B-Line, Lyons Ferry Rd.	-1.323 on -1.222 off		
8/25	MP 212.5 Starbuck Compressor Station # 7 Rectifier for anode flex beds are placed along station piping.	41.96 Amps		Circuits for Station Anode Beds: <u>Settings, vDC, Amps</u> #1: C-F, F-7, 58.7, 12.4 #2: C-F, F-7, 58.6, 8.04 #3: C-F, F-7, 59.0, 6.14 #4: C-F, F-4, 34.1, 6.55 #5: C-F, F-7, 58.1, 8.83

Date	Location	Pipe (Volts DC)	Casing (Volts DC)	Comments
8/25	MP 212.5 Starbuck Comp. Sta. #7 Test Pt. (TP) #32 TP #1 TP #7 TP #24	-4.02 v on -2.01 v on -2.23 v on -1.83 v on		< B-Line Inlet, Suction < B-Line < A-Line
8/25	MP 212.5 Starbuck Compressor Station #7 Rectifier for anode flex beds placed along the discharge piping.	5.4 Amps		Circuits for Discharge Anode Beds: <u>Settings, vDC, Amps</u> #22: C-1, F-2, 1.146, 1.82 #23: C-1, F-2, 0.868, 2.04 #24: C-1, F-2, 1.193, 1.70 #25: C-1, F-2, 4.650, 0 Note: Since the last inspection, the positive wire to the ground beds <u>has been</u> labeled per PHMSA Notice.
8/25	MP 212.5 Starbuck Compressor Station #7 Two Rolls-Royce Turbines: Avon at 12,500hp and RB-211 at 39,000hp. Gas piping to Auxiliary Power Supply TP #30	-3.38 v on		Tested two gas and fire sensors in Compressor Buildings C. Discharge Gas Temp: 95 deg. F Inlet to cooler Gas Temp: 101 deg. F
8/25	MP 218.7 Welch Road, A-Line B-Line	-1.364v on -1.147v on		

Date	Location	Pipe (Volts DC)	Casing (Volts DC)	Comments
8/26	MP 220.9 Welch Road, NORTH Rectifier for anode flex beds placed along the pipelines.	10.13 vDC 22.8 Amps C-1, F-3		Circuits for <u>NORTH</u> Anode Beds: <u>Settings, vDC, Amps</u> #43: C-1, F-3, 6.49, 2.11 #44: C-1, F-3, 8.55, 2.33 #45: C-1, F-3, 8.62, 2.17 #46: C-1, F-3, 4.99, 1.81 #47: C-1, F-3, 7.17, 3.41 #48: C-1, F-3, 6.28, 2.29 #49: C-1, F-3, 4.40, 2.74 #50: C-1, F-3, 3.98, 2.98 #51: C-1, F-3, 2.94, 3.02 Note: Since the last inspection, the positive wire to the ground beds <u>has</u> <u>been</u> labeled per PHMSA Notice.
8/26	MP 220.9 Welch Road, SOUTH Rectifier for anode flex beds placed along the pipelines.	10.15 vDC 15.6 Amps C-1, F-3		Circuits for <u>SOUTH</u> Anode Beds: <u>Settings, vDC, Amps</u> #52: C-1, F-3, 2.48, 3.23 #53: C-1, F-3, 3.08, 2.72 #54: C-1, F-3, 4.23, 2.78 #55: C-1, F-3, 4.76, 2.41 #56: C-1, F-3, 5.88, 2.61 #57: C-1, F-3, 6.70, 2.71 Note: Since the last inspection, the positive wire to the ground beds <u>has</u> <u>been</u> labeled per PHMSA Notice.
8/26	MP 224.2 Babcock Rectifier			Circuits for <u>NORTH</u> Anode Beds: <u>Settings, vDC, Amps</u> #58: C-1, F-2, 3.92, 1.33 #59: C-1, F-2, 3.53, 1.37 #60: C-1, F-2, 3.01, 1.36 #61: C-1, F-2, 2.36, 1.16 #62: C-1, F-2, 2.04, 1.17 #63: C-1, F-2, 2.13, 1.45

Date	Location	Pipe (Volts DC)	Casing (Volts DC)	Comments
8/26	MP 224.2 Babcock Rectifier			Circuits for SOUTH Anode Beds: <u>Settings, vDC, Amps</u> #64: C-1, F-2, 1.63, 1.81 #65: C-1, F-2, 2.02, 1.59 #66: C-1, F-2, 2.67, 1.34 #67: C-1, F-2, 2.91, 1.32 #68: C-1, F-2, 3.34, 1.32 #69: C-1, F-2, 4.40, 1.52 #70: C-1, F-2, 4.93, 1.56 #71: C-1, F-2, 4.56, 1.24 #72: C-1, F-2, 4.35, 1.12 #73: C-1, F-2, 5.07, 1.10
8/26	MP 224.2 Line-A Line-B	-0.969 -1.033	-0.263	
8/26	MP 229.9 Greenville Rd. NORTH Rectifier for anode flex beds placed along the pipelines.	10.28 vDC 12.8Amps C-1, F-3		Circuits for NORTH Anode Beds: <u>Settings, vDC, Amps</u> #74: C-1, F-3, 8.24, 1.97 #75: C-1, F-3, 8.41, 0 #76: C-1, F-3, 8.41, 0 #77: C-1, F-3, 5.87, 2.32 #78: C-1, F-3, 8.41, 0 #79: C-1, F-3, 4.05, 1.48 #80: C-1, F-3, 3.86, 1.58 #81: C-1, F-3, 2.50, 1.73 #82: C-1, F-3, 2.90, 1.92 #83: C-1, F-3, 1.03, 2.04 Note: Since the last inspection, the positive wire to the ground beds <u>has been labeled</u> per PHMSA Notice.
8/26	MP 229.9 Greenville Rd. SOUTH Rectifier for anode flex beds placed along the pipelines.	10.19 vDC 18.4 Amps C-1, F-3		Circuits for SOUTH Anode Beds: <u>Settings, vDC, Amps</u> #84: C-1, F-3, 1.09, 2.57 #85: C-1, F-3, 3.31, 2.28 #86: C-1, F-3, 3.52, 2.57 #87: C-1, F-3, 4.23, 2.40 #88: C-1, F-3, 5.62, 2.33 #89: C-1, F-3, 5.78, 2.20 #90: C-1, F-3, 6.63, 2.07 #91: C-1, F-3, 7.75, 2.29 Note: Since the last inspection, the positive wire to the ground beds <u>has been labeled</u> per PHMSA Notice.

Date	Location	Pipe (Volts DC)	Casing (Volts DC)	Comments
8/26	MP 234.6 Rectifier at Hwy 124 & Struthers Rd.			Circuits for Anode Beds: <u>Settings</u> , <u>vDC</u> , <u>Amps</u> #92: C-1, F-2, 6.75, 1.91 #93: C-1, F-2, 6.81, 1.39 #94: C-1, F-2, 5.34, 1.59 #95: C-1, F-2, 5.29, 1.32 #96: C-1, F-2, 3.55, 1.22 #97: C-1, F-2, 4.03, 1.39 #98: C-1, F-2, 3.08, 1.51 #99: C-1, F-2, 1.91, 1.64
8/26	Main Line Valve 7-1 (TP#2)	-1.07 vDC		Neil Isley GTN field technician operated the A-Line Valve A-1
8/26	MP 238.0 Eureka Flats Rectifier A-Line B-Line	41.9 vDC 0.8 Amps C-c, F-2 -0.904 v -1.066 v	-0.200 v	This site has an anode bed and a deep well.
8/26	MP 241.9 Main Line Valve 7-2	-1.174		Neil Isley GTN field technician operated the A-Line Valve A-1.
8/26	MP 244.8 Britton Rd Rectifier A-Line B-Line	13.38 vDC 9.6 Amps -1.788 v -1.741 v		The cable from the rectifier to the pipelines, approximately 300 feet in length, was broken in September 2008 and since has been repaired.
8/26	MP 254.3 A-Line at Chevron Xing Mg Anode #3 Mg Anode #4 Chevron #1 Chevron #2 B-Line at Chevron Xing Mg Anode #5 Mg Anode #6 Chevron #1 Chevron #2	-1.22 vDC -1.599 v -1.566 v -1.723 v -1.726 v -1.131 v -1.482 v -1.604 -1.535 -1.571		Approximately, 0.11 amp of current is flowing from Chevron pipeline to TransCanada pipeline.

Date	Location	Pipe (Volts DC)	Casing (Volts DC)	Comments
8/26	Wallula Compressor Station #8 has Three Turbines including: Rolls-Royce Avon at 12,500hp, and two Solar Titans at 19,500hp each.			Two gas and fire sensors (IR #1 & #3) in Compressor Buildings C were successfully tested.
8/26	Wallula Compressor Station #8 Plant Rectifier A-Line Suction Piping B-Line Suction Piping A-Line Discharge Piping B-Line discharge Piping	-1.873v -1.587v -1.303v -1.207v		Circuits for Anode Beds: <u>Settings, vDC, Amps</u> #1: C-d, F-6, 37.75, 11.7 #2: C-d, F-5, 35.32, 14.9 #3: C-b, F-6, 15.89, 15.5 #4: C-c, F-2, 21.02, 14.0 Note: Since the 2008 inspection circuit #1 has been restored to use.